

What is claimed is:

1. An encrypting method of encrypting information to be recorded by using an encryption key, comprising the steps of:
generating an encryption key based on inherent information inherent in a recording medium; and
encrypting said information to be recorded on said recording medium based on said encryption key, wherein said inherent information inherent in said recording medium is a specific information on a disk.

2. An encrypting method according to claim 1, wherein said inherent information inherent in said recording medium is a frequency of a predetermined portion of a wobbled pre groove or a wobbled land portion to be formed on said recording medium.

3. An encrypting method according to claim 2, further comprising the step of :
generating a file indicative of a predetermined portion of a wobbled pre groove or a wobbled land portion to be formed on said recording medium, wherein said file is data to be recorded on said recording medium together with a file of said encrypted information.

4. An encrypting apparatus for encrypting information to be recorded by using an encryption key, comprising:
a means for generating an encryption key based on

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inherent information inherent in a recording medium; and
a means for encrypting said information to be
recorded on said recording medium based on said encryption key,
wherein said inherent information inherent in said recording
medium is a specific information on a disk.

5. An encrypting apparatus according to claim 4,
wherein said inherent information inherent in said recording
medium is a frequency of a predetermined portion of a wobbled
pre groove or a wobbled land portion to be formed on said
recording medium.

6. An encrypting apparatus according to claim 1,
further comprising:

a means for generating a file indicative of a
predetermined portion of a wobbled pre groove or a wobbled land
portion to be formed on said recording medium, wherein said file
is data to be recorded on said recording medium together with a
file of said encrypted information.

7. A recording method of recording on a recording
medium information obtained by encrypting information to be
recorded by using an encryption key, comprising the steps of:

receiving an encrypted information based on an
encryption key generated based on inherent information inherent
in a recording medium; and

recording said received encrypted information on a

recording medium, wherein said inherent information inherent in said recording medium is a specific information on a disk.

8. A recording method according to claim 7, wherein said inherent information inherent in said recording medium is a frequency of a predetermined portion of a wobbled pre groove or a wobbled land portion to be formed on said recording medium

9. A recording method according to claim 8, wherein a file indicative of a predetermined portion of said wobbled pregroove or wobbled land portion to be formed on said recording medium is received and said file is recorded on said recording medium together with a file of said encrypted information.

10. An encrypting method of encrypting information to be recorded by using an encryption key, comprising the steps of:
generating an encryption key based on inherent information inherent in a recording medium; and

encrypting said information to be recorded on said recording medium based on said encryption key, wherein said inherent information inherent in said recording medium is a random data inserted into a predetermined portion of said encrypted information to be recorded on said recording medium.

11. An encrypting method according to claim 10, further comprising the step of:

generating a file indicative of a predetermined

portion of a random data inserted into a predetermined portion of said encrypted information to be recorded on said recording medium, wherein said file is data to be recorded on said recording medium together with a file of said encrypted information.

12. An encrypting method according to claim 10, wherein said random data is data to be recorded on said recording medium as a normal file according to ISO9660 standard.

13. An encrypting method according to claim 10, wherein said random data is data to be recorded on said recording medium as an interleaved file.

14. An encrypting method according to claim 10, wherein said random data is data to be recorded on said recording medium as a multi extent file.

15. An encrypting method according to claim 10, wherein said random data is data to be recorded on a pre gap area of a file according to ISO9660 standard.

16. An encrypting method according to claim 10, wherein said random data is data to be recorded on a system area of a file according to ISO9660 standard.

17. An encrypting method according to claim 10,

wherein said random data is data to be recorded on an application area of a primary volume descriptor of a file according to ISO9660 standard.

18. An encrypting method according to claim 10, wherein said random data is data to be recorded on a surface of said recording medium.

19. An encrypting method according to claim 10, wherein said random data is random data selected from a predetermined portion of a random file generated by a predetermined pseudo random generator.

20. An encrypting method according to claim 19, wherein a file indicative of said predetermined portion of said random file formed of said random data and said random file are recorded on said recording medium together with a file of said encrypted information.

21. An encrypting apparatus for encrypting information to be recorded by using an encryption key, comprising:

a means for generating an encryption key based on inherent information inherent in a recording medium; and

a means for encrypting said information to be recorded on said recording medium based on said encryption key, wherein said inherent information inherent in said recording

medium is a random data inserted into a predetermined portion of said encrypted information to be recorded on said recording medium.

22. An encrypting apparatus according to claim 21, further comprising:

a means for generating a file indicative of a predetermined portion of a random data inserted into a predetermined portion of said encrypted information to be recorded on said recording medium, wherein said file is data to be recorded on said recording medium together with a file of said encrypted information.

23. An encrypting method according to claim 21, wherein said random data is data to be recorded on said recording medium as a normal file according to ISO9660 standard.

24. A recording method of recording on a recording medium information obtained by encrypting information to be recorded by using an encryption key, comprising the steps of:

receiving an encrypted information based on an encryption key generated based on inherent information inherent in a recording medium; and

recording said received encrypted information on said recording medium, wherein said inherent information inherent in said recording medium is a random data inserted into a predetermined portion of said encrypted information to be

recorded on said recording medium.

25. A recording method according to claim 24, wherein a file of said encrypted information and a file indicative of a predetermined portion of said random data inserted into a predetermined portion of said encrypted information to be recorded on said recording medium are recorded on said recording medium.

26. A recording method according to claim 24, wherein said random data is random data selected from a predetermined portion of a random file generated by a predetermined pseudo random generator.

27. A recording method according to claim 26, wherein a file indicative of said predetermined portion of said random file formed of said random data and said random file are recorded on said recording medium together with a file of said encrypted information.

28. A recording method according to claim 24, wherein said random data is data to be recorded on said recording medium as a file according to ISO9660 standard.

29. A recording method of recording on a recording medium information obtained by encrypting information to be recorded by using an encryption key, comprising the steps of:

receiving an encrypted information based on an encryption key generated based on inherent information inherent in a recording medium; and

recording said received encrypted information on said recording medium, wherein said inherent information inherent in said recording medium is recorded on a surface of said recording medium.

30. An encrypting method of encrypting information to be recorded by using an encryption key, comprising the steps of:

generating a third encryption key from a first encryption key generated from information inherent in a recording medium and a second encryption key independent of said first encryption key; and

encrypting information to be recorded on said recording medium by using said third encryption key.

31. An encrypting method according to claim 30, wherein said inherent information inherent in said recording medium is a frequency of a predetermined portion of a wobbled pregroove or a wobbled land portion to be formed on said recording medium.

32. An encrypting method according to claim 30, wherein said inherent information inherent in said recording medium is random data inserted in to a predetermined portion of said encrypted information to be recorded on said recording

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receiving an encrypted information based on an encryption key generated based on a third encryption key generated from a first encryption key generated from information inherent in a recording medium and a second encryption key independent of said first encryption key; and

recording said received encrypted information on a recording medium.

37. A decrypting method of decrypting an encrypted information recorded on a recording medium, comprising the steps of:

reproducing a first file storing information encrypted by using an encryption key generated based on a random data to be inserted into a predetermined portion of said encrypted information to be recorded on a recording medium and a second file storing data indicative of a predetermined portion of said random data to be inserted into a predetermined portion of said encrypted information, from said recording medium;

detecting said random data from said encrypted information stored in said reproduced first file based on said data stored in said reproduced second file and indicating said predetermined portion of said random data;

generating a decryption key from said detected random data; and

decrypting said encrypted information of said reproduced first file by using said decryption key.

recording medium and a second file storing data indicative of a predetermined portion of said wobbled pregroove or wobbled land portion to be formed on said recording medium;

detecting said wobbling frequency of a predetermined portion of said pregroove or land portion formed on said recording medium based on said data stored in said reproduced second file and indicating said predetermined portion of said wobbled pregroove or said wobbled land portion;

generating a decryption key from said detected wobbling frequency; and

decrypting said encrypted information stored in said reproduced first file by using said decryption key.

40. A decrypting method of decrypting an encrypted information recorded on a recording medium, comprising the steps of:

reproducing a file storing information encrypted by using an encryption key generated based on a random data selected from a predetermined portion of a random file formed of said random data generated by a predetermined pseudo random data generator, a file storing data indicative of a predetermined portion of said random file formed of said random data, and said random file;

generating a decryption key from said random data of said predetermined portion obtained from said random file based on said file storing data indicative of a predetermined portion of said reproduced random file; and

decrypting said reproduced encrypted information by using said decryption key.

41. A decrypting method of decrypting an encrypted information recorded on a recording medium, comprising the steps of:

generating a first decryption key from inherent information inherent in a recording medium where there is recorded information encrypted by a third encryption key generated based on a first encryption key generated from said inherent information inherent in said recording medium and a second encryption key independent of said first encryption key;

generating a third decryption key based on a second decryption key recorded on a predetermined key medium and corresponding to said second encryption key and said first decryption key; and

decrypting said information encrypted by using said third encryption key and reproduced from said recording medium, by using said third decryption key.

42. A decrypting method according to claim 41, wherein said key medium is a card where said second decryption key is recorded magnetically or optically.

43. A decrypting method according to claim 41, wherein said key medium comprises a memory storing said second decryption key.

44. A decrypting apparatus for decrypting an encrypted information recorded on a recording medium, comprising:

a means for reproducing from said recording medium a first file storing information encrypted by using an encryption key generated based on a random data to be inserted into a predetermined portion of said encrypted information to be recorded on a recording medium and a second file storing data indicative of a predetermined portion of said random data to be inserted into a predetermined portion of said encrypted information;

a means for detecting said random data from said encrypted information stored in said reproduced first file based on said data stored in said reproduced second file and indicating said predetermined portion of said random data;

a means for generating a decryption key from said detected random data; and

a means for decrypting said encrypted information of said reproduced first file by using said decryption key.

45. A decrypting apparatus for decrypting an encrypted information recorded on a recording medium, comprising:

a means for reproducing from a recording medium a first file storing information encrypted by using an encryption key generated based on a wobbling frequency of a predetermined

portion of said information to be recorded on a recording medium and a second file storing data indicative of a predetermined portion of said encrypted information to be recorded on said recording medium;

a means for detecting said wobbling frequency of a predetermined portion of said information stored in said reproduced first file based on said data stored in said reproduced second file and indicating said predetermined portion of said encrypted information;

a means for generating a decryption key from said detected wobbling frequency; and

a means for decrypting said encrypted information of said reproduced first file by using said decryption key.

46. A decrypting apparatus for decrypting an encrypted information recorded on a recording medium, comprising:

a means for reproducing from a recording medium a first file storing information encrypted by using an encryption key generated based on a frequency of a predetermined portion of a wobbled pregroove or a wobbled land portion to be formed on a recording medium and a second file storing data indicative of a predetermined portion of said wobbled pregroove or wobbled land portion to be formed on said recording medium;

a means for detecting a wobbling frequency of a predetermined portion of said pregroove or land portion formed on said recording medium based on said data stored in said

reproduced second file and indicating said predetermined portion of said wobbled pregroove or said wobbled land portion;

a means for generating a decryption key from said detected wobbling frequency; and

a means for decrypting said encrypted information stored in said reproduced first file by using said decryption key.

47. A decrypting apparatus for decrypting an encrypted information recorded on a recording medium, comprising:

a means for reproducing a file storing information encrypted by using an encryption key generated based on a random data selected from a predetermined portion of a random file formed of said random data generated by a predetermined pseudo random data generator and recorded on a predetermined recording medium, a file storing data indicative of a predetermined portion of said random file formed of said random data, and said random file;

a means for generating a decryption key from said random data of said predetermined portion obtained from said random file based on said file storing data indicative of a predetermined portion of said reproduced random file; and

a means for decrypting said reproduced encrypted information by using said decryption key.

48. A decrypting apparatus for decrypting an

decrypting apparatus, wherein said recorded signal comprises a first file storing information encrypted by using an encryption key generated based on random data to be inserted into a predetermined portion of an encrypted information.

52. A recording medium according to claim 51, wherein said recorded signal further comprises a second file storing data indicative of a predetermined portion of said random data to be inserted into a predetermined portion of said encrypted information.

53. A recording medium capable of being used in decryption by a decrypting apparatus, comprising:

a recorded signal capable of being decrypted by a decrypting apparatus, wherein said recorded signal comprises a first file storing information encrypted by using an encryption key generated based on a wobbling frequency of a predetermined portion of a recording medium.

54. A recording medium according to claim 53, wherein said recorded signal further comprises a second file storing data indicative of a predetermined portion of said encrypted information to be recorded on said recording medium.

55. A recording medium capable of being used in decryption by a decrypting apparatus, comprising:

a recorded signal capable of being decrypted by a

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decrypting apparatus, wherein said recorded signal comprises a first file storing information encrypted by using an encryption key generated based on a frequency of a predetermined portion of a wobbled pregroove or a wobbled land portion to be formed on a recording medium.

56. A recording medium according to claim 55, wherein said recorded signal further comprises a second file storing data indicative of a predetermined portion of a wobbled pregroove or a wobbled land portion to be formed on a recording medium.

57. A recording medium capable of being used in decryption by a decrypting apparatus, comprising:

a recorded signal capable of being decrypted by a decrypting apparatus, wherein said recorded signal comprises a file storing information encrypted by using an encryption key generated based on a random data selected from a predetermined portion of a random file formed of said random data generated by a predetermined pseudo random generator.

58. A recording medium according to claim 57, wherein said recorded signal further comprises a second file storing data indicative of a predetermined portion of a random file formed of said random data.

59. A recording medium capable of being used in

decryption by a decrypting apparatus, comprising:

a recorded signal capable of being decrypted by a decrypting apparatus, wherein said recorded signal comprises information encrypted by using a third encryption key generated based on a first encryption key generated from inherent information inherent in a recording medium and a second encryption key independent of said first encryption key.

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